



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,220	03/29/2002	David C. Robinson	105714	7103

27074 7590 04/22/2005

OLIFF & BERRIDGE, PLC.

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

ALAVI, AMIR

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/063,220	Applicant(s) ROBINSON ET AL.	
	Examiner Amir Alavi	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20020329</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 1-7 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cullen et al. (USPN 5,465,304).

Regarding claim 1, Cullen et al., disclose: Inputting data of an existing document that contains a visual design to input an image (please note, column 4, lines 42-44. In this regard, the scanning does the inputting, while, Examiner considers the document image to correspond to Applicant's visual design); decomposing the image into at least one image processing technique (please note, column 4, line 41. In this regard, Examiner considers the segmentation to correspond to Applicant's decomposition); determining at least one design attribute of the at least one object (please note, column 5, line 36. In this regard, Examiner considers this rectangle construction to correspond to Applicant's design attribute); and synthesizing a document template containing the at least one design attribute (please note, column 5, line 37. In this regard, Examiner considers this rectangle merging to correspond to Applicant's synthesizing).

Regarding claim 2, Cullen et al., disclose, wherein inputting data of the existing document comprises scanning the existing document (please note, column 4, line 42. As indicated scanning processing).

Regarding claim 3, Cullen et al., disclose, wherein decomposing the image into at least one object comprises using an image segmentation technique (please note, column 4, line 41. As indicated segmentation processing).

Regarding claim 4, Cullen et al., disclose, wherein decomposing the image into at least one object comprises using an image classification technique

(please note, figure 2C, step 204, in correlation to, column 5, line 32 and column 6, lines 20-24. As indicated classification processing).

Regarding claim 5, Cullen et al., disclose, wherein decomposing the image into at least one object comprises using an optical character recognition Technique (please note, column 4, line 39. As indicated OCR processing).

Regarding claim 6, Cullen et al., disclose, wherein decomposing the image into at least one object comprises decomposing the image into at least one spatial characteristic (please note, column 2, lines 47-48. In this regard, Examiner considers these text, images and straight lines to correspond to Applicant's spatial characteristics).

Regarding claim 7, Cullen et al., disclose, wherein decomposing the image into at least one spatial characteristic comprises decomposing the image into at least one of text regions, pictorials and line art (please note, column 2, lines 47-48).

Regarding claim 9, Cullen et al., disclose, wherein determining at least one design attribute of the at least one object comprises using an optical character recognition technique (please note, column 4, line 39).

Regarding claim 10, Cullen et al., disclose, wherein determining at least one design attribute of the at least one object comprises determining a page layout (please note, figures 12 and 13, in correlation to column 5, line 36. In this regard, Examiner considers this rectangle construction to correspond to Applicant's page layout).

Regarding claim 11, Cullen et al., disclose, wherein determining at least one design attribute of the at least one object comprises determining font information (please note, column 11, lines 64-67 and column 12, lines 1-2. In this regard, it's evident that by modifying the threshold values the font informations such as font size are being determined).

Regarding claim 12, arguments analogous to those presented for claim 1, are applicable, however having an image processor performing these operations (please note, figure 1b, element 111).

Regarding claim 13, Cullen et al., disclose, wherein the input device comprises a scanner that scans the existing document (please note, figure 1a, in correlation to column 5, line 11. As indicated scanner 101).

Regarding claim 14, Cullen et al., disclose, wherein a data storage device that stores the document template (please note, column 5, lines 40-44).

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cullen et al. (USPN 5,465,304) in view of Kopec et al. (USPN 5,594,809).

Regarding claim 8, Cullen et al., disclose: Inputting data of an existing document that contains a visual design to input an image (please note, column 4, lines 42-44. In this regard, the scanning does the inputting, while, Examiner considers the document image to correspond to Applicant's visual design); decomposing the image into at least one image processing technique (please note, column 4, line 41. In this regard, Examiner considers the segmentation to correspond to Applicant's decomposition); determining at least one design attribute of the at least one object (please note, column 5, line 36. In this regard, Examiner considers this rectangle construction to correspond to Applicant's design attribute); and synthesizing a document template containing the at least one design attribute (please note, column 5, line 37. In this regard, Examiner considers this rectangle merging to correspond to Applicant's synthesizing).

However, Cullen et al., do not specifically disclose, wherein decomposing the image into at least one color theme.

On the other hand, Kopec et al., in the same field of endeavor disclose, wherein decomposing the image into at least one color theme (please note, column 33, lines 12-15. As indicated a trained character template for each unique character in the 2D image, in the specific font of the samples, could be derived from the pixel colors of the set of pixels that make up each glyph sample).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize this color information of Kopec et al., in Cullen et al.'s invention, because as Kopec et al., on lines 7-15 discloses this would be advantageous in situations wherein multiple sample images of a unique character in a character set in a particular font exist).

Other prior art cited

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tahara et al. (USPN 5,657,086) is pertinent as teaching high efficiency encoding of picture signals.

Loui et al. (USPN 6,636,648 B2) is pertinent as teaching alburning method with automatic page layout.

Loce et al. (USPN 6,738,517 B2) is pertinent as teaching document image segmentation using loose gray scale template matching.

Pizano et al. (USPN 5,293,429) is pertinent as teaching system and method for automatically classifying heterogeneous business forms.

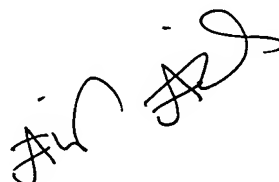
Cyman, Jr. et al. (USPN 5,845,302) is pertinent as teaching method and system for producing high quality, highly personalized printed documents.

Kagle (USPN 6,779,153 B1) is pertinent as teaching creation of web pages through synchronization.

Chen et al. (USPN 6,701,308 B1) is pertinent as teaching method and apparatus for fixed format word processing.

Contact Information

- Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386.
- The examiner can normally be reached on Mon-Thu.. 8:00 am thru 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bhavesh Mehta can be reached on 571-272-7453.
- The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.
- For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be "Amir Alavi", is located in the bottom right corner of the page.